

Appl. No. : 10/719,498
Filed : November 20, 2003

REMARKS

Claims 1-13 are pending in this application. The Examiner rejected Claims 1-13. In particular, the Examiner rejected Claims 1-3 and 11-13 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,923,129 issued to Henry ("the Henry patent"). The Examiner further rejected Claims 1-13 under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-12 of U.S. Patent No. 6,654,268 ("the parent patent").

By this amendment, Applicant has amended Claims 1 and 11-13. Reconsideration of the application, as amended, is respectfully requested.

I. RESUBMISSION OF INFORMATION DISCLOSURE STATEMENT

The Examiner stated that the previously filed Information Disclosure Statement was partially non-compliant because two references with the following document numbers cannot be found: US23161164 and US22180380. Applicant hereby resubmits these references with the corrected document numbers: US 2003/0161164 and US 2002/0180380. While Applicant does not believe that these references will affect the patentability of the pending claims, Applicant respectfully requests the Examiner to consider the pending claims in connection with these references in order to make them of record.

II. OTHER REFERENCE

Applicant would like to bring to the Examiner's attention U.S. Patent No. 6,670,781 issued to Weindorf ("the Weindorf patent"). The Weindorf patent recently came to Applicant's attention, and it is not clear whether Applicant is required to disclose this reference. However, out of an abundance of caution, Applicant wishes to disclose this reference to the Examiner to erase any possible doubt as to whether Applicant has satisfied his duty of disclosure. A copy of the Weindorf patent is enclosed for the Examiner's convenience.

III. REJECTION OF CLAIMS 1-3 AND 11-13 UNDER 35 U.S.C. § 102

The Examiner rejected Claims 1-3 and 11-13 under 35 U.S.C. § 102(b) as being anticipated by the Henry patent. In view of the following discussion, Applicant respectfully traverses these rejections.

Applicant respectfully submits that the claims as previously pending are patentably distinguished over the Henry patent. Claims 1 and 11-13, however, have been amended without altering their scope in order to clarify the features of Applicant's inventions. These claim

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amendments are not made for patentability purposes, and it is believed that the claims would satisfy the statutory requirements for patentability without the entry of such amendments. Applicant therefore respectfully submits that Claims 1-3 and 11-13 are patentably distinguished over the cited reference and Applicant respectfully requests allowance of Claims 1-3 and 11-13.

A. Claim 1

Focusing in particular on Claim 1 and the timing diagrams shown in Figure 5, a power conversion circuit for driving a fluorescent lamp includes a controller configured to generate signals (DIMCLK 206) with active states and inactive states. The durations of the active states are equal to or greater than an updated duration (T_{MIN} 308) determined by a first pulse generator circuit which monitors the number of cycles of current flowing through the fluorescent lamp (I_{LAMP} 130 or associated V_{SENSE} 126) with respective amplitudes above a preset threshold (V_{REF} 410).

In contrast, the Henry patent appears to disclose a controller that senses an average (or total) current through a fluorescent lamp and compares the sensed current to a desired current to adjust the duty cycle of each lamp current cycle to increase/decrease the total current. See Col. 8, line 45 to Col. 9, line 17. The Henry patent does not appear to disclose, teach or suggest a controller that monitors the number of cycles of current flowing through a fluorescent lamp with respective amplitudes above a preset threshold. Applicant therefore respectfully submits that Claim 1 is patentably distinguished over the cited reference.

B. Claims 2-3

Claims 2-3, which depend from Claim 1, are believed to be patentable for the same reasons articulated above with respect to Claim 1, and because of the additional features recited therein.

C. Claim 11

Claim 11 is directed to a method of controlling reduced brightness of a fluorescent lamp. The method includes supplying an AC voltage to the fluorescent lamp in periodic bursts. The method keeps track of the number of desired cycles in an AC current flowing through the fluorescent lamp in response to the AC voltage. The desired cycles in the AC current have amplitudes exceeding a preset threshold. The method adjusts durations of the bursts to achieve a predefined number of desired cycles in each burst.

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The Henry patent does not appear to disclose, teach or suggest keeping track of the number of desired cycles in an AC current (with amplitudes exceeding a preset threshold) flowing through a fluorescent lamp. Accordingly, Applicant respectfully submits that Claim 11 is patentably distinguished over the cited reference.

D. Claim 12

Claim 12 is directed to a power conversion circuit for driving a fluorescent lamp at a reduced brightness level. The power conversion circuit includes means for providing an AC voltage to the fluorescent lamp during an on-time, means for keeping track of the number of desired cycles in an AC current flowing through the fluorescent lamp in response to the AC voltage, and means for adjusting the on-time to achieve a selected number of the desired cycles. The desired cycles in the AC current have amplitudes exceeding a preset threshold.

The Henry patent does not appear to disclose, teach or suggest means for keeping track of the number of desired cycles in an AC current flowing through a fluorescent lamp with amplitudes exceeding a preset threshold. Thus, Applicant submits that Claim 12 is patentably distinguished over the cited reference.

E. Claim 13

Claim 13 is directed to a power conversion circuit for driving a fluorescent lamp. The power conversion circuit includes a controller configured to generate signals with active states and inactive states based in part on an input from a first pulse generator circuit which monitors the number of cycles of current flowing through the fluorescent lamp with respective amplitudes above a preset threshold.

The Henry patent does not appear to disclose, teach or suggest monitoring the number of cycles of current flowing through a fluorescent lamp with respective amplitudes above a preset threshold. Therefore, Applicant respectfully submits that Claim 13 is distinguished over the cited reference.

IV. REJECTION OF CLAIMS 1-13 FOR OBVIOUSNESS-TYPE DOUBLE PATENTING

A Terminal Disclaimer is filed with this response. Accordingly, withdrawal of the double patenting rejection is requested.

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V. CONCLUSION

In view of the foregoing, the present application is believed to be in condition for allowance, and such allowance is respectfully requested. If further issues remain to be resolved, the Examiner is cordially invited to contact the undersigned such that any remaining issues may be promptly resolved. Also, please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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